



2011 PMOC Annual Meeting

FEDERAL TRANSIT ADMINISTRATION

Project Cost Escalation

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FTA Escalation Issues

Why does FTA desire an Escalation Review?

- FTA is experiencing PMOC inconsistency in reviewing escalation.
- FTA has had extended discussions with Grantees over the acceptable rates of escalation.

FTA's objective is a consistent approach to selection of the escalation factor for a project.

Approach to Escalation Review

- Clarify definitions used in the review of Escalation
- Characterization of PMOC Process
 - FTA polled PMOC firms for their approach
 - Describe the process followed by PMOCs
- Inflation Indices
 - General Economic Inflation
 - Commodity Inflation
- Open Discussion to Assist FTA in providing a policy statement
 - Review and Estimation of Project Escalation
 - Escalation Risk Mitigation Approaches

Definitions

Same or Different

Except — Accept

Flammable — Inflammable

Inflation — Escalation

Definitions

Inflation

The change in the general level of prices in the economy from one period to another.

Escalation

An increase in the estimated cost for an item to provide for inflationary increases in cost.

Definitions

- **Base Year Estimate:** The estimated project cost in current dollars without any escalation.
- **YOES:** Year of expenditure dollars – the amount paid or to be paid for the project.
- **Baseline Cost Estimate:** the project cost estimate in YOES.

Definitions

- **Rate of Inflation:** the annualized rate of change in cost.
- **Escalation Rate:** the percentage of the increase in estimated cost per period; usually expressed as an annual rate.
- **Escalation Factor:** the escalation rate compounded to the year of expenditure.

PMOC Process for Escalation Rate Review

1. Review the National and Global Economic Outlook
2. Review Published Inflation Indices
3. Review the Inflation History of Critical Materials or Products
4. Extrapolate from Inflation Data to Predict an Escalation Rate That Will Compensate for Inflation.

1. Review of Inflation Outlook

- Overall National and Global Economic Outlook
 - Factors Affecting Transport (shortage of transport)
 - Labor Being Consumed by Disaster (Katrina Factor)
 - Raw Material Shortages or Price Increases
- Local Market Conditions (total number of projects)
- Local Labor Shortages (sandhogs in New York City)
- Trends in Material Pricing (ready-mix concrete, etc.)

2. Review Indices of Inflation

- ENR Building Cost Index (BCI)
- ENR Construction Cost Index (CCI)
- Consumer Price Index (CPI)
- Bureau of Labor Statistics Producer Price Index (PPI)
- Bureau of Economic Analysis Gross Domestic Product (GDP)
- International Monetary Fund
- Associated General Contractors of America (AGC)
- Commercial Economic/Financial forecasts (Moody's, Standard & Poor's, etc.)

3. Review Commodity Inflation

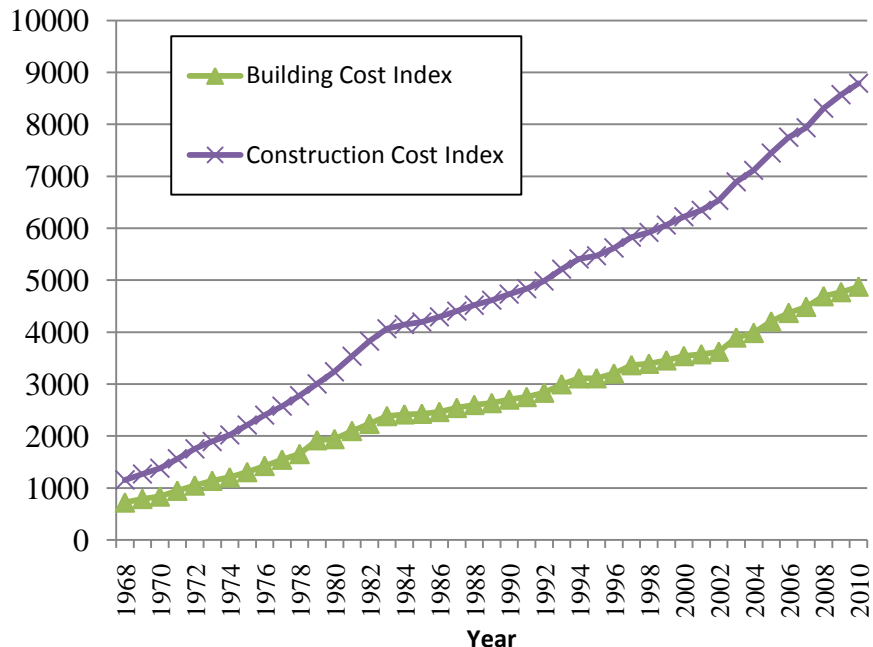
- Review Project for Critical Commodities
 - Portland Cement
 - Pre-cast Concrete
 - Structural Steel
 - Copper Wire
 - Diesel Fuel

4. Estimate Escalation Needs

- Extrapolate Escalation Rate from Long Term Inflation Index
- Using Review of Economic Outlook and Commodity Inflation History Adjust Escalation Rate to Compensate for Predicted Inflation Rate Changes

ENR Inflation Indices

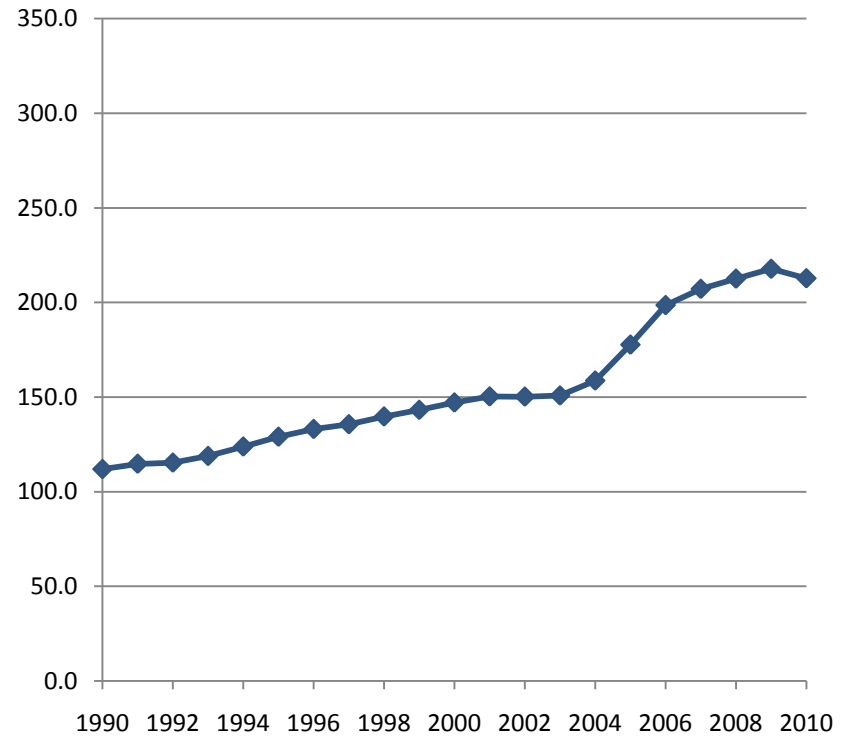
Period	Years	BCI		CCI	
		Average	Compound	Average	Compound
Near-term – 2004-2009	5	3.67%	3.66%	3.80%	3.79%
Mid-term - since 2000	9	3.39%	3.37%	3.63%	3.62%
Long-term - since 1983	26	2.72%	2.70%	2.91%	2.91%
Very Long-term - since 1968	41	4.78%	4.72%	5.06%	5.01%



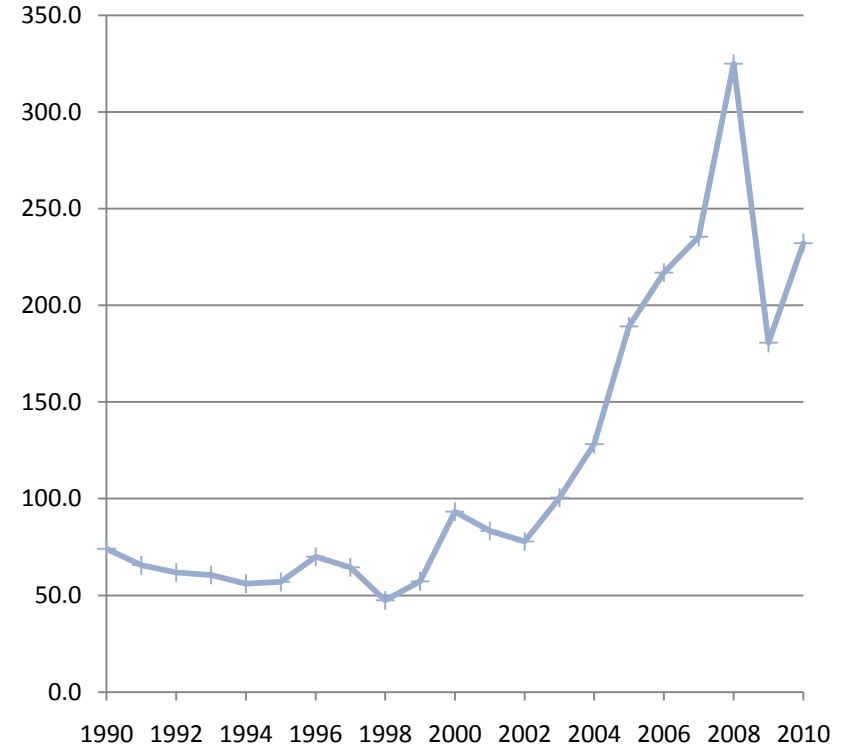
- ENR Construction Cost Index
 - 200 Hours Common Labor
 - Materials (Cement, Steel, Lumber)
- ENR Building Cost Index
 - 68.38 Hours Skilled Labor
 - Materials

BLS PPI Indices

Concrete – Ready-mix 133301

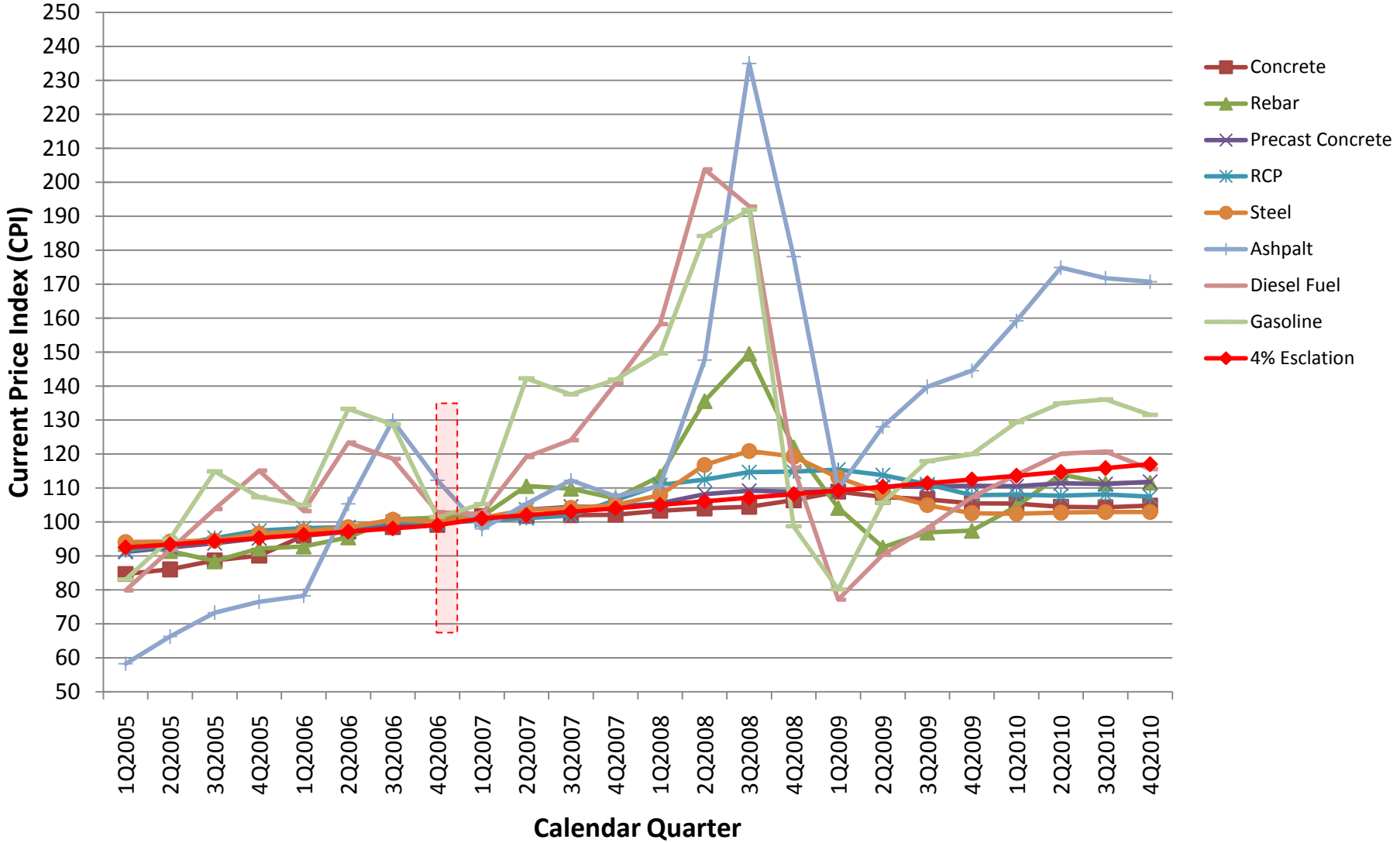


Fuel – Diesel 057303



BLS PPI at Dulles

Current Price Index -- Dulles Corridor Metrorail Extension



Commodity Inflation

Escalation of Baseline Cost Estimate

- Compensate for Expected Inflation in Escalation Rate

Risk Mitigation Strategies

- Control by Hedging – Advance Purchases
- Control Risk using Indexed Pricing in Contracts

Preliminary Recommendations

- Standard Escalation Factor Set from Inflation Index
 - ENR BCI is recommended since it is most frequently used
- Grantee Adjustments Compared to Standard
- Grantee to Justify Alternate to PMOC
 - Near-Term Escalation Can Be Based on Forecast

Discussion Topics

- Building Escalation into the Base Year Cost
- Setting the Overall Escalation Factor
- Inflation Risk Mitigation

Inflation Risk Mitigation Strategies

- Choose Project Escalation Factor
- Use of Commodity Inflation Indices
- Escalation inside the Base Year Cost
- Contract Packaging Strategy
 - Minimize Contractor Escalation Risk

- What issues have you encountered when reviewing Escalation in the Grantee budget?
- Any recommendations to FTA for improving consistency in choosing Escalation Factors?